

WHAT IS CLAIMED IS:

1. A personal versatile recorder for recording ~~any type of data~~ comprising:
a central processing unit;
a data storage device;
a connection to a cable television system for receiving a signal comprising television programming and a data transport stream for transmitting streamed audiovisual content, multimedia files or software;
wherein said central processing unit selectively records said television programming and data from said data transport stream on said data storage device.

2. The recorder of claim 1, wherein said multimedia files comprise one or more of the following a picture file, a graphics file, a video file or an audio file, or any combination thereof

3. The recorder of claim 1, wherein said multimedia files include web pages and said connection providing said data transport stream connects said recorder to the internet.

4. The recorder of claim 1, further comprising a user interface for controlling said central processing unit to selectively record said television programming and content from said data transport stream.

5. The recorder of claim 1, wherein said data of said software of said data transport stream comprises software executable by said central processing unit to enable said central processing unit to manage and open any type of multimedia data file.

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6. The recorder of claim 1, wherein said data storage device is a hard drive.

5 7. The recorder of claim 1, further comprising an audio/video output for connecting said recorder to a television set or monitor for outputting programming or data stored on said data storage device to said television set or monitor.

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10 8. The recorder of claim 1, wherein said recorder is integrated into a cable television set-top terminal that comprises a broadband primary tuner for tuning a selected channel from said signal received from said cable television system.

15 9. The recorder of claim 8, wherein said set-top terminal further comprises a secondary tuner for tuning said data transport stream from the signal received from said cable television system.

20 10. The recorder of claim 9, wherein said secondary tuner is controlled by said central processing unit to tune one of a plurality of data transport streams.

11. The recorder of claim 1, further comprising an upstream transmitter for transmitting requests for data over said connection.

25 12. The recorder of claim 1, wherein said central processing unit transcodes streaming audiovisual programming received in said data transport stream, said recorder further comprising a user interface for controlling a compression rate of said transcoding performed by said central processing unit.

30 13. The recorder of claim 1, further comprising an agent application executed by said central processing unit for identifying and recording or caching

data from said data transport stream or television programming that matches parameters input by a user.

14. The recorder of claim 1, further comprising a multimedia e-mail application executed by said central processing unit.

15. The recorder of claim 1, further comprising a voice recognition system for verbally inputting parameters or commands to applications running on said central processing unit.

16. A method of receiving and recording television programming and any type of multimedia data with a personal versatile recorder, said method comprising selectively recording on a data storage device any of television programming, steamed audiovisual content, a multimedia file or software that is received by said personal versatile recorder in a composite signal that includes at least one data transport stream and a television signal.

17. The method of claim 16, wherein said multimedia file comprises one or more of the following a picture file, a graphics file, a video file or an audio file.

18. The method of claim 16, wherein said multimedia file is a web page and a connection providing said data transport stream connects said recorder to the internet.

19. The method of claim 16, further comprising controlling said central processing unit to selectively record said audiovisual programming and said data transport stream with a user interface.

20. The method of claim 16, wherein said data of said data transport stream comprises software executable by said central processing unit to enable said central processing unit to manage and open any type of multimedia data file.

5 21. The method of claim 16, further comprising employing a hard drive as said data storage device.

10 22. The method of claim 16, further comprising outputting said television programming or data stored on said data storage device to a television set or monitor.

15 23. The method of claim 16, wherein said recorder is integrated into a cable television set-top terminal and said method further comprises receiving said television programming with a broadband primary tuner for tuning a selected channel from said audiovisual programming which is received from a cable or satellite television system.

20 24. The method of claim 23, further comprising receiving said data transport stream with a secondary tuner for tuning said data transport stream from the signal received from said television system.

25 25. The method of claim 24, further comprising controlling said secondary tuner to tune any of a plurality of channels or transport streams contained in said composite signal.

30 26. The method of claim 16, further comprising transmitting requests for data or applications with an upstream transmitter.

27. The method of claim 16, further comprising:
transcoding streaming audiovisual programming received in said data
transport stream; and
controlling a compression rate of said transcoding performed by said
central processing unit in response to user input.

28. The method of claim 16, further comprising executing an agent
application for identifying, obtaining, and recording or caching data from either
said transport stream or said audiovisual programming that matches parameters
input by a user.

29. The method of claim 16, further comprising generating a
multimedia e-mail file or message with said personal versatile recorder.

30. The method of claim 16, further comprising verbally inputting
parameters or commands to applications running on said central processing unit
with a voice recognition system.

31. The method of claim 16, further comprising controlling said
recording in response to copyright authorization information in said programming,
content, file or software being received.

32. The method of claim 16, further comprising regulating said
download, recording, and access to said recording function of said personal
versatile recorder in response to a control signal from a system operator over
whose system said composite signal is provided.

33. A method of offering video-on-demand over a cable television
network comprising, during a designated download timeframe, downloading a
requested video-on-demand program over said cable television network to a

personal versatile recorder connected to said cable television network where said program is recorded in said personal versatile recorder for playback under control of a user.

5 34. The method of claim 33, wherein said downloading is performed as a background task.

10 35. The method of claim 33, wherein said downloading is performed in response to a purchase signal transmitted by a user over said cable television network.

15 36. The method of claim 33, further comprising transmitting a signal over said cable television network to indicate to users those programs available for downloading.

20 37. The method of claim 36, further comprising transmitting said signal indicative of programs available to said user selectively based on demographic or preference information concerning said users.

20 38. The method of claim 33, wherein said downloading further comprises recording said program on a magnetic or optical disc drive unit of said personal versatile recorder.

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